



**BUREAU OF ENERGY AND
TECHNOLOGY POLICY**

November 17, 2021

2022-2024 Conservation and Load Management Plan

Public Input Session

Department of Energy and Environmental Protection



Meeting Logistics

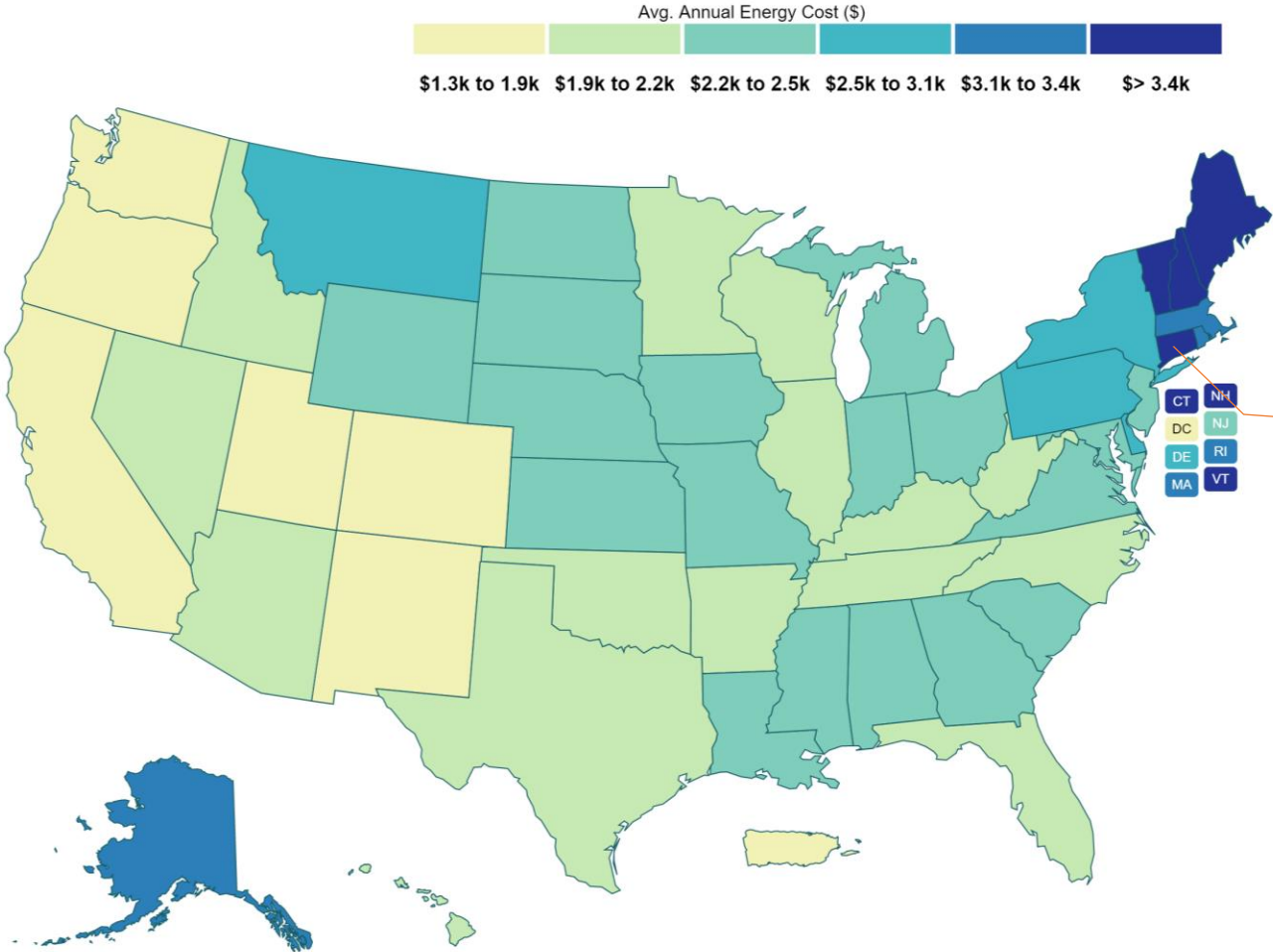
During the Meeting:

- This meeting will be recorded.
- Recordings and slides will be available on DEEP's C&LM webpage after the meeting.
- Please remain on mute.
- Refrain from using the chat function for side conversations.
- DEEP will facilitate questions that attendees ask questions of presenters using the chat function.

Public Comments

- After brief presentations, we will begin with pre-registered commenters, then open the floor for additional comments.
- If you did not register but would like to make a comment, please raise your hand and we will recognize you, in order.
- Please keep comments to no more than seven minutes.

Connecticut's Energy Affordability Challenge



The average Connecticut household spends \$3,600 on annual energy bills.

Low-Income Energy Affordability Data Tool Map Export (<https://lead.openel.org/>)
Exported On: 3/25/2021
AMI: 0% - 30%, 30% - 60%, 60% - 80%, 80% - 100%, 100%+
Building Age: Before 1940, 1940 - 59, 1960 - 79, 1980 - 99, 2000 - 09, 2010+
Heating Fuel Type: Utility Gas, Bottled Gas, Electricity, Fuel Oil, Coal, Wood, Solar, Other, None
Building Type: 1 unit detached, 1 unit attached, 2 units, 3 - 4 units, 5 - 9 units, 10 - 19 units, 20 - 49 units, 50+ units, Boat/RV/Van, Mobile/Trailer
Rent/Own: Renter-occupied, Owner-occupied



2022-2024 Conservation & Load Management Plan

Connecticut's Energy Efficiency and Demand Management Plan

Submitted by: Eversource Energy, United Illuminating, Connecticut Natural Gas Corporation, and Southern Connecticut Gas

November 1, 2021

What is the Conservation and Load Management Plan?

- State guidebook for implementing cost-effective energy conservation programs and initiatives
- Developed on a 3-year cycle, updated annually
- Saves all ratepayers money by reducing demand on electric system
- Reduces harmful emissions from fossil fuel plants, addresses climate, health, and environmental justice concerns
- Generates bill savings to address the energy affordability gap
- Drives lower operating costs for local businesses
- Supports a local, highly-skilled, energy efficiency workforce

**BUREAU OF ENERGY AND
TECHNOLOGY POLICY**



2020 Program Benefits



Every \$1.00 collected results in an additional \$4.84 of clean energy investment

This investment by residential, business and municipal energy customers improves the quality of life in Connecticut.

44,094 Jobs

Clean energy investment supports Connecticut jobs in HVAC, electrical, manufacturing, insulation, weatherization and solar industries. (Includes 36,000 efficiency jobs)¹

\$6.2 Billion increase to the gross state product

Generated by the Conservation and Load Management Plan (Eversource, CNG, SCG and UI) and the Comprehensive Plan (Connecticut Green Bank).²

\$1 →
\$4.84



GSP

Energy savings equivalent to a 122 MW power plant

This is enough energy to power approximately 40,923 homes for a year.



186,081 tons of CO₂ emissions avoided, plus \$5.2 Million in public health costs saved

Supporting our state's drive towards carbon neutrality.³



\$72 Million in Connecticut tax revenues

Generated from energy efficiency, renewable and financing measures supported by the Conservation and Load Management Plan (Eversource, CNG, SCG, UI) and the Comprehensive Plan (Connecticut Green Bank).⁴



**BUREAU OF ENERGY AND
TECHNOLOGY POLICY**



Conservation and Load Management Plan Review

Completed:

- The Utilities worked to develop the 2022-2024 Conservation and Load Management Plan with guidance from the Energy Efficiency Board, Consultants, and DEEP.
- The Energy Efficiency Board held public input sessions on the draft 2022-2024 Plan, most recently in August.
- The Energy Efficiency Board approved the 2022-2024 Plan text in September and the budgets and savings tables in October.
- The Utilities filed the 2022-2024 Plan with DEEP on November 1, 2021.
- DEEP issued Requests for Information regarding the 2022-2024 Plan to the Utilities on November 4, 2021. The Utilities began issuing responses to these Requests on November 12, 2021.

In Progress:

- DEEP is holding three public meetings to inform its review of the 2022-2024 Plan:
 - November 16 Technical Meeting
 - November 17 Public Input Session
 - November 18 Technical Meeting
- DEEP will issue a Draft Determination on the 2022-2024 Plan. At that time, there will be an opportunity for written comments.
- DEEP will issue a Final Determination on the 2022-2024 Plan that considers information received during this process.

Where can I find C&LM planning documents?

DEEP C&LM webpage:

- News and information about upcoming DEEP meetings
- Current and approved C&LM plans, including the proposed [2022-2024 Plan](#)
- Archived C&LM planning documents
- Related DEEP initiatives, including the Equitable Energy Efficiency Proceeding and Weatherization Barrier Remediation Program.

DEEP Energy Filings:

- Filed C&LM Plans and annual updates
- DEEP Determinations, including compliance conditions
- Utility responses to compliance conditions, requests for information, annual reporting, and other items
- Records of ongoing DEEP proceedings

Energy Efficiency Board Website:

- C&LM planning documents
- Schedules of Board and Committee meetings
- Presentations from Board and Committee meetings, including quarterly and annual reporting from the Utilities
- Program evaluation report and annual legislative reports
- [Statewide Energy Efficiency Dashboard](#) of program activity

Energize CT Website:

- Customer-facing information on solutions, incentives, programs, and events
- Electric Supplier Rate Board



Part of the AVANGRID Family

November 17, 2021, 6:10-6:40 PM

2022-2024 Energy Efficiency Plan General Overview

Agenda

- Revenues and budgets
- Savings and benefits
- Plan priorities
- New for 2022-2024
 - Residential programs
 - Commercial & Industrial programs
 - Education, Workforce & Community Outreach programs

Electric Revenues

ES CT Electric/UI EE REVENUES	2021 Eversource CT Electric Revenues 11/01/2021	2021 UI Revenues 11/01/2021	2021 Eversource CT Electric/UI Total 11/1/2021	2022 Eversource CT Electric Revenues 11/01/2021	2022 UI Revenues 11/01/2021	2022 Eversource CT Electric/UI Total 11/1/2021
-------------------------------	---	--------------------------------------	--	---	--------------------------------------	--

ISO-NE Forward Capacity Market Revenues**	\$ 27,207,761	\$ 5,769,761	\$ 32,977,522	\$ 24,637,290	\$ 4,918,613	\$ 29,555,903
Class III Renewable Energy Credits	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
RGGI*	\$ 10,591,031	\$ 2,647,758	\$ 13,238,789	\$ 13,914,221	\$ 3,478,555	\$ 17,392,776
CAM (Net of Gross Receipts Tax)	\$ 96,098,791	\$ 21,109,835	\$ 117,208,626	\$ 115,617,786	\$ 26,487,209	\$ 142,104,995
Prior Period Over/(Under) Collections	\$ 5,663,346	\$ 510,211	\$ 6,173,557	\$ -	\$ -	\$ -
Prior Period Under/(Over) Budget	\$ 21,680,096	\$ 6,173,825	\$ 27,853,921	\$ -	\$ -	\$ -
Estimated Interest Due to Company/ Other Revenues	\$ -	\$ 754,781	\$ 754,781	\$ -	\$ -	\$ -
Total - EE Revenues	\$ 161,241,025	\$ 36,966,170	\$ 198,207,195	\$ 154,169,297	\$ 34,884,377	\$ 189,053,674

ES CT Electric/UI EE REVENUES	2023 Eversource CT Electric Revenues 11/01/2021	2023 UI Revenues 11/01/2021	2023 Eversource CT Electric/UI Total 11/1/2021	2024 Eversource CT Electric Revenues 11/01/2021	2024 UI Revenues 11/01/2021	2024 Eversource CT Electric/UI Total 11/1/2021
ISO-NE Forward Capacity Market Revenues**	\$ 16,091,200	\$ 3,166,813	\$ 19,258,013	\$ 12,699,130	\$ 2,685,762	\$ 15,384,892
RGGI*	\$ 14,050,435	\$ 3,512,609	\$ 17,563,044	\$ 13,504,570	\$ 3,376,143	\$ 16,880,713
CAM (Net of Gross Receipts Tax)	\$ 115,373,411	\$ 26,190,229	\$ 141,563,640	\$ 115,730,093	\$ 25,898,853	\$ 141,628,946
Total - EE Revenues	\$ 145,515,046	\$ 32,869,651	\$ 178,384,697	\$ 141,933,793	\$ 31,960,758	\$ 173,894,551

*RGGI Budget is based on calculation by the Companies and DEEP.

**The EE FCM Payment Rates are: FCA-11-\$5.30/kW-month, FCA-12-\$4.63/kW-month, FCA-13-\$3.80/kW-month, FCA-14-\$2.00/kW-month and FCA-15-\$2.61/kW-month.

Natural Gas Revenues

	<u>2021</u> Eversource CT Gas	<u>2021</u> CNG	<u>2021</u> SCG	<u>2021</u> Combined Eversource CT Gas/CNG/SCG Total	<u>2022</u> Eversource CT Gas	<u>2022</u> CNG	<u>2022</u> SCG	<u>2022</u> Combined Eversource CT Gas/CNG/SCG Total
Natural Gas EE Revenues	Revenues 03/01/2021	Revenues 03/01/2021	Revenues 3/1/2021		Revenues 11/01/2021	Revenues 11/01/2021	Revenues 11/1/2021	

Conservation Adjustment Mechanism	\$ 23,227,356	\$ 13,490,545	\$ 13,350,257	\$ 50,068,158	\$ 23,409,733	\$ 16,322,487	\$ 14,498,605	\$ 54,230,826
Prior Period Over/(Under) Collections	\$ (3,319,814)	\$ (2,210,145)	\$ (1,755,578)	\$ (7,285,537)	\$ -	\$ -	\$ -	\$ -
Prior Period Under/(Over) Budget	\$ 797,645	\$ 5,102,519	\$ 3,188,750	\$ 9,088,914	\$ -	\$ -	\$ -	\$ -
Estimated Interest Due to Company/ Other Revenues	\$ -	\$ 368,376	\$ 309,972	\$ 678,348	\$ -	\$ -	\$ -	\$ -
Total Revenues	\$ 20,705,187	\$ 16,751,296	\$ 15,093,401	\$ 52,549,884	\$ 23,409,733	\$ 16,322,487	\$ 14,498,605	\$ 54,230,826

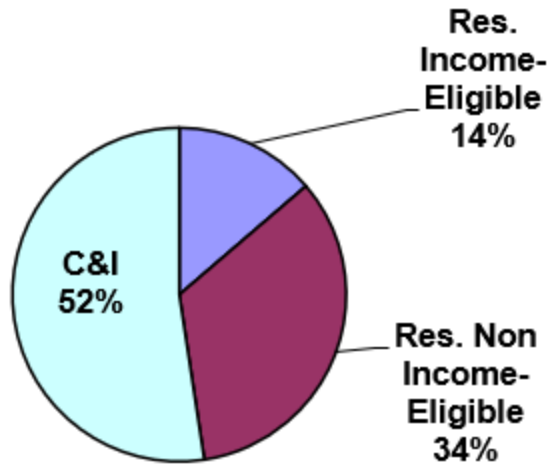
	<u>2023</u> Eversource CT Gas	<u>2023</u> CNG	<u>2023</u> SCG	<u>2023</u> Combined Eversource CT Gas/CNG/SCG Total	<u>2024</u> Eversource CT Gas	<u>2024</u> CNG	<u>2024</u> SCG	<u>2024</u> Combined Eversource CT Gas/CNG/SCG Total
Natural Gas EE Revenues	Revenues 11/01/2021	Revenues 11/01/2021	Revenues 11/1/2021		Revenues 11/01/2021	Revenues 11/01/2021	Revenues 11/1/2021	

Conservation Adjustment Mechanism	\$ 24,105,077	\$ 16,381,537	\$ 14,692,511	\$ 55,179,125	\$ 24,544,270	\$ 16,450,030	\$ 14,841,752	\$ 55,836,052
Total Revenues	\$ 24,105,077	\$ 16,381,537	\$ 14,692,511	\$ 55,179,125	\$ 24,544,270	\$ 16,450,030	\$ 14,841,752	\$ 55,836,052

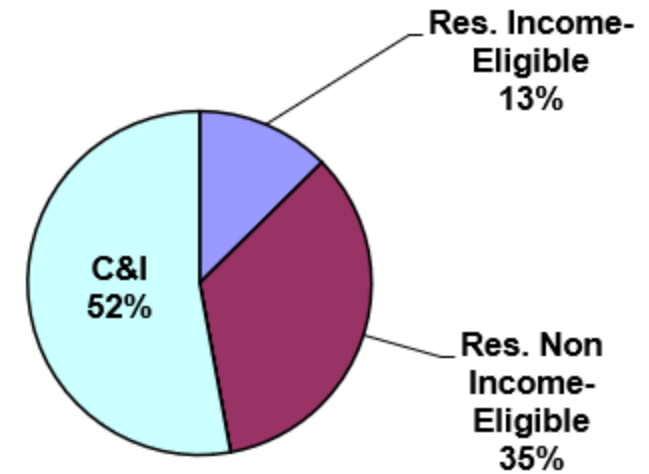
All Figures are net of GET. All companies are decoupled.

Electric Parity Chart (2022)

EE Budget By Customer Class



EE Revenue By Customer Class



Budgets are aligned with revenues; Budgets are 1% higher for Income Eligible within the Residential Sector.
Natural Gas budgets are aligned to support the Electric budgets.

2022-2024 Plan:

\$707 million investment in energy efficiency

Every \$1 invested in energy efficiency results in a \$2.61 return in benefits

Electric lifetime savings of 4.7 billion kilowatt-hours (kWh)

Natural gas lifetime savings of 23.9 billion cubic feet of natural gas (Bcf)

Oil lifetime savings of 80.3 million gallons

Propane lifetime savings of 14.1 million gallons

Combined annual peak demand reduction (active and passive) of 395 Megawatts (MW)

Savings & Benefits

Year	Budgets (\$000)			Annual Savings							Lifetime Savings	
	Electric	Natural Gas	Total	Electric (GWh)*	Peak (MW)**	Natural Gas (MMcf)	Oil (gallons)	Propane (gallons)	Annual Savings (MMBtus)*	CO ₂ Emissions (tons)	Lifetime Benefit (\$000)	Lifetime Savings (MMBtus)***
2022	\$189,054	\$54,231	\$243,284	190	125	528	1,448,963	277,276	1.4	133,066	\$606,205	18.3
2023	\$178,385	\$55,179	\$233,564	169	131	541	1,378,837	258,524	1.3	125,098	\$569,530	17.5
2024	\$173,895	\$55,836	\$229,731	156	139	540	1,363,332	254,614	1.3	119,724	\$549,406	17.1
Total	\$541,333	\$165,246	\$706,579	516	395	1,609	4,191,132	790,415	4.1	377,889	\$1,725,141	53.0

*Abbreviation for Gigawatt hours.

**Savings include demand response programs.

***In millions of MMBtu (one million British Thermal Units). Figures listed are site MMBtus and address only the energy saved at the meter level.

Cost-Effectiveness Testing

- Electric and fossil fuel avoided costs based on 2021 Avoided Energy Supply Cost (AESC) study
- Three tests used:
 - Utility Cost Test: Includes value of utility-specific benefits and program costs associated with those benefits
 - Modified Utility Cost Test: Includes all benefits/costs of UCT and includes oil and propane-avoided costs and program costs associated with acquiring oil and propane savings
 - Total Resource Cost Test: All energy and non-energy benefits (water savings, non-embedded emissions, environmental attributes, and non-energy impacts) and all costs associated with acquiring these savings (program and customer out-of-pocket)
- Includes ADR benefits and costs in screening models

Plan Priorities

Equity

Equitable distribution of benefits of energy efficiency and active demand response programs across state, communities, market segments, and customer types

Decarbonization

Reducing greenhouse gas emissions from building sector to meet legislative/regulatory goals re: air pollutants and climate change

Energy Affordability

Promoting economic development through lower energy bills, enhanced energy security, and increased reliability

Residential Programs

Retail Products

**HVAC and Water
Heating Equipment**

**Residential New
Construction &
Additions**

**Home Energy
Solutions**

**Home Energy
Solutions-Income
Eligible**

**Multifamily
Building**

**Behavioral
Strategies**

New for 2022-2024 Plan

- **Retail Products**

- Eliminated Retail lighting products in big box outlets
- Introduce induction cooktops to ENERGY STAR® Retail Products Platform
- Add dehumidifiers to online marketplace

- **HVAC and Water Heating Equipment**

- Promote heat pumps
- Add room A/Cs to Appliance Recycling

- **Residential New Construction**

- Offer permanent Major Renovations & Additions pathway
- Increase Passive House design and certification
- Increase promotion of all-electric offering for new construction projects

New for 2022-2024 Plan

- **Home Energy Solutions and HES-Income Eligible**

- Introduce DOE Home Energy Score to HES-IE
- Offer “Final DOE Home Energy Score” to customers
- Develop Virtual Concierge service, promote add-on measures recommended during HES assessment
- Work with DEEP’s selected vendor for Weatherization Barrier Program
- Launch HES pay-for-performance pilot

- **Multifamily Initiative**

- Host additional landlord roundtables to understand barriers to participation/diversity
- Develop landlord testimonials

- **Behavioral Strategies**

- Offer customized energy usage insights to customers through natural digital touchpoints



Commercial & Industrial Offerings

**New Construction,
Equipment
Replacement &
Major Renovations**

Retrofit Services

Small Business

**Business and
Energy
Sustainability**

New for 2022-2024 Plan

- **Commercial & Industrial New Construction, New Equipment & Major Renovations**
 - Increase adoption of Net Zero Energy, Zero Net Energy Ready, and Passive House
 - Support integration of renewable energy, grid interactive buildings, and ADR offerings
 - Provide packaged offerings for all-electric new construction projects
 - Offer more midstream incentives (heat pumps, natural gas measures, HVAC/commercial kitchen equipment)
- **Energy Opportunities**
 - Launch Benchmarking Initiative, encourage C&I customers to benchmark and potentially derive savings attribution
 - Transition learnings from HVAC Modernization pilot to full program
 - Increase weatherization efforts, development of CT weatherization contractor network
 - Improve mechanical & ventilation systems for K-12 school buildings
 - Explore new market segments (agriculture, cannabis, grocery, telecom, unmanned telecom shelters/cabinets)
 - Explore opportunities for refrigerant leak detection and remediation measures

New for 2022-2024 Plan

- **Small Business**

- Increase heat pump installations, additional training for contractors
- Investigate enhanced incentives for microbusinesses that install non-lighting/comprehensive measures
- Focus on weatherization, targeting businesses in converted residences
- Package industrial EE programs for small manufacturers
- Integrate workforce efforts for small businesses and manufacturers

- **Business & Energy Sustainability**

- Transition United Illuminating's Virtual-Based Commissioning pilot to a program
- Add Operations & Maintenance measures, including refrigerant leak detection, repair, and charging
- Add Strategic Energy Management offering for virtual treasure hunts, engage customers with SEM Lite options



Education, Workforce & Community Outreach Programs

Education

Community Outreach

Workforce Development

New for 2022-2024 Plan

- **Education**

- Conversion of all K-12 lessons into online format (web-based or App platform)
- Energize CT Energy in Action mobile exhibit
- Integrate educator-developed lessons/learning sequence plans into curriculum and workshops

- **Workforce Development**

- Administer Workforce Study to understand role of diversity/geography in the workforce, as well as barriers
- Invest in upskilling current/future EE workforce through trainings, contractor education, and outreach
- Increase outreach to schools, community colleges and community-based organizations to promote technical trainings and certifications as pathways into workforce
- Support the Industrial Assessment Center

- **Community Outreach**

- Community Partnership Initiative
- Energize CT Energy in Action mobile exhibit

Public Comment

- We will begin with those that pre-registered to comment, then open the floor for additional comments.
- If you did not register but would like to make a comment, please raise your hand and we will recognize you in order.
- Please keep comments to no more than seven minutes.
- Please unmute yourself when recognized and return to mute when you are finished.

Thank you for attending!

Upcoming Technical Meeting:

- November 18, 9:00 a.m. – 5:00 p.m.

9:00-9:30	Opening remarks and public comment
9:30-12:30	Residential Portfolio
12:30-1:30	Break
1:30-3:15	Education, Workforce Development, and Outreach
2:30-4:30	Demand Response
4:30-5:00	Public comment and closing remarks

Next Steps:

- DEEP will issue a Draft Determination on the 2022-2024 Plan. At that time, there will be an opportunity for written comments.
- DEEP will issue a Final Determination on the 2022-2024 Plan that considers information received during this process

Resources:

- [2022-2024 Conservation and Load Management Plan](#)
- [DEEP C&LM Webpage](#)
- [DEEP Bureau of Energy and Technology Policy Energy Filings](#)
- [Connecticut Energy Efficiency Board](#)
- [Energize CT](#)

BUREAU OF ENERGY AND
TECHNOLOGY POLICY

